# Business Formation Statistics: Research and Production

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# **Business Formation Statistics (BFS)**



Fills a gap in the availability of high frequency, timely data on new business formation in the U.S.

- Other data products measure new business activity with a lag
- For example, Census Bureau's Business Dynamics Statistics
   (BDS) offers annual information on business entry with a 2-year lag
- BFS focuses on measuring early-stage business activity with shorter lag and with more frequent updates
- Currently released as an experimental data product





# **BFS Research History**

Research collaboration with economists at Board of Governors of the Federal Reserve System, Federal Reserve Bank of Atlanta, University of Maryland, and University of Notre Dame.

- Research Paper by Bayard, Dinlersoz, Dunne, Haltiwanger, Miranda (2018) provides details on the construction of BFS series
- Initial development phase spanned 2012-2018
- Released first as a research product on February 14, 2018
- First vintage: Quarterly Data, 2004Q3-2017Q3

Transitioned to the Economic Indicator Division for Production in 2019,

### **BFS Production Timeline**

First release of
Quarterly BFS by
Economic Indicator
Division

(national, regional, state)

January 14

Final Quarterly BFS Release

October 22
Special release of
Weekly BFS by
NAICS
for 2019-2020

March
(tentative)
Annual county
BA series through
2020

Late 2021 (tentative) Implement new HBA NAICS Criteria

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#### **Publications by Year**

- 2019 2 Quarterly Releases
- 2020 41 Weekly Releases, 4
   Quarterly Releases, 1 Annual Release
- 2021 (estimated) 49 Weekly Releases, 11 Monthly Releases, 1 Quarterly Release, 1 Annual Release

April 9
First release of
Weekly BFS
(national, regional)

April 16
Weekly state data

added

Annual release of
county level
Business
Application series
through 2019 February 10
First Monthly BFS

**November 11** 

Release, including monthly series by 2-digit NAICS

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Census 2020

# Data widely featured during pandemic

For New Congress And Forbes, 2/4/21 **Administration: State Of Small Business And Entrepreneurship** 

**Business Startups Surged Amid Covid-19** 

**Pandemic** Insurance Journal, 1/19/2021

Americans are hatching many new businesses, confounding expectations CBS News, 2/8/21

Data Bank: Oregon business filings climb in 2020 in

spite of pandemic closures

Portland Business Journal, 1/29/21

With small businesses suffering, women turning to entrepreneurship

Greater Baton Rouge Business Report, 1/26/21

**How To Start A Business During** COVID

Forbes, 1/17/21

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### Source and Types of BFS Series

All applications for an EIN via IRS form SS-4 (starting in 2004q3) delivered weekly to Census Bureau are inputs to the BFS processing.

#### BFS consists of

- 4 Business Application Series
- 8 Business Formation Series (formations are applications that become employer businesses)

#### Series are available:

- Nationwide, by region, by state on a monthly and weekly basis, by county on an annual basis
- By sector (NAICS) nationwide on monthly basis
- Seasonally adjusted on a monthly basis

Application series updated weekly and monthly as new EIN applications arrive Formation series updated annually as new business formation information becomes available



### **Business Application Series**

Several criteria applied to the entire set of EIN applications to generate business application series

Business Applications (BA) - The core series that includes all EIN applications made in the U.S. (50 states + DC) except those filed without a business intent:

- Trusts, estates, tax-liens
- Public entities
- Some other filings with little or no business intent (e.g. personal tax/finance related filings, some household activities, etc.)



### **Business Application Series**

High-Propensity Business Applications (HBA): Applications that have a relatively high likelihood of becoming employer businesses

- From corporate entities
- Indicate hiring employees, purchasing a business or changing organizational type
- Provide a date for first-wages paid/planned
- In manufacturing, part of retail, health care, and food/accommodation services

Business Applications with Planned Wages (WBA) – a subset of HBA

Provide a date for first-wages paid/planned

Business Applications from Corporations (CBA) – a subset of HBA

• From corporate entities



### **Business Formation Series**

Use Census Bureau's Longitudinal Business Database (LBD) to identify new employer firm (EIN) births from business applications and the timing (quarter) of these births

#### Business Formations within 4 Quarters (BF4Q):

Employer businesses that originate from Business Applications (BA) within a four quarter window from the quarter of application

#### Projected Business Formations within 4 Quarters (PBF4Q):

- Projected employer businesses that originate from Business Applications (BA) within a four quarter window from the quarter of application
- Provides estimates for the quarters for which actuals are not yet available
- Estimates based on a model of employer birth indicator as a function of application characteristics

Series that piece together actual and projected formations, and series that measure average duration from application to formation (SBF4Q,DUR4Q)

All series also provided for an 8-quarter window (BF8Q, PBF8Q, SBF8Q, DUR8Q)



### Benefits of the BFS

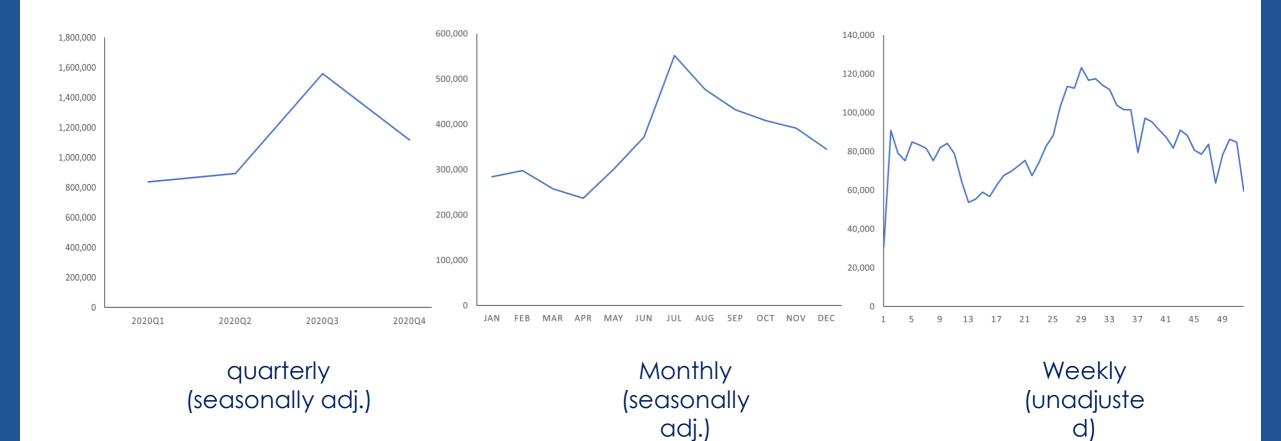
Analysis indicates that EIN applications provide forward-looking and timely information on business formation in the United States

- Work in progress to explore properties of BFS series as early indicators of economic activity
- Particularly BA and NHBA series (and part of BA that is not HBA which may be informative about non-employer business formation)

More frequent and timely BFS data allows policymakers, analysts, and researchers to better monitor the state of entrepreneurial activity in the United States

Proved especially useful during the COVID-19 Recession in monitoring the weekly progress of business applications

### **Business Applications (BA) in 2020**



Source: Quarterly, Monthly, and Weekly Business Formation Statistics

2020CENSUS.GOV

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### **Business Applications and Transitions**

**Great Recession** 

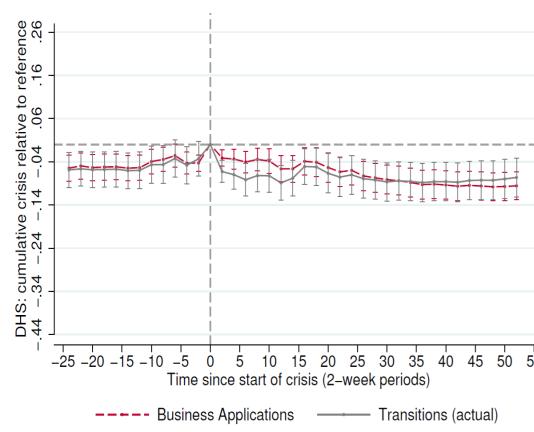
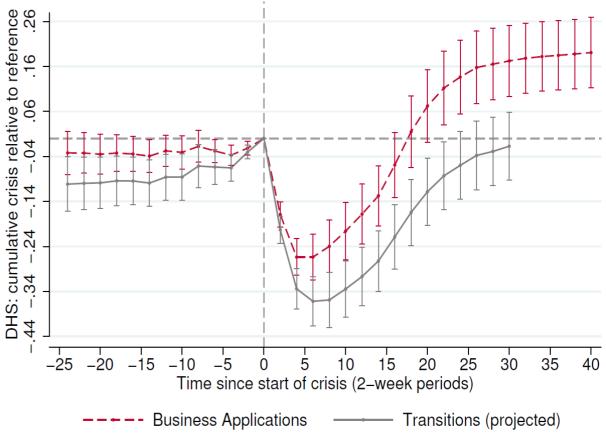


Figure 1a: Great Recession — Applications and Transitions



**Covid-19 Recession** 

Figure 1b: COVID -- Applications and Transitions

Source: <u>Dinlersoz</u>, <u>Dunne</u>, <u>Haltiwanger</u>, <u>Penciakova</u> (2021) "Business Formation: A Tale of Two Recessions", forthcoming AEA P&P May 2021

# **Current Research Projects**

Properties of BFS as an early indicator of economic activity, with a goal to establish some BFS series as PFEIs

• by Asturias, Dinlersoz, Haltiwanger, and Hutchinson

Understanding non-employer business activity that originates from business applications, and modeling of non-employer versus employer business formation

• by Dinlersoz and Luque

Exploring local origins of business applications and transitions to employer status: the effects of local characteristics

• by Dinlersoz, Dunne, Haltiwanger, and Penciakova

Sectoral shifts and reallocation in business applications and formation during recessions

• by Dinlersoz, Dunne, Haltiwanger, and Penciakova

### Questions

- We are now publishing the BFS series at a higher-frequency (e.g. weekly, monthly) and with more geographic granularity (e.g. county). Are there other series would you like to see in the future?
- What uses of BFS do you see in your specific expertise/industry/practice? Do you think BFS
  might be helpful in your decision-making? What else would you like to see in BFS that would
  make it more useful to you?

